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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,983	03/15/2006	Patric Heide	4001-1200	5796
466	7590	08/30/2007		
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			EXAMINER GREGORY, BERNARR E	
			ART UNIT 3662	PAPER NUMBER
			MAIL DATE 08/30/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/531,983

Applicant(s)

HEIDE ET AL.

Examiner

Bernarr E. Gregory

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Throughout claims 1-16, the uses of the term “high-frequency” are indefinite and unclear in context in that the term is a relative term with no clear point of reference. That is to say, it is not clear in context what frequencies in the continuum of frequencies would be “high-frequency” values and which would not. Please see 37 CFR §1.75(d)(1).

Lines 1-5 of independent claim 1 are indefinite and unclear in context in that a multistatic sensor arrangement would have plural transmitters and plural receivers, but claim 1 has only recited “a transmit unit” and “a receive unit.”

On line 3 of claim 1, it is unclear in context what the antecedent is for the word “each.”

On line 7 of claim 1, “the pulse generator” (plural) lacks antecedent basis in that it cannot take the singular term “pulse generator” (line 4) as antecedent.

On lines 12-13 of claim 1, “the high-frequency oscillators” (plural) lacks clear antecedent basis in that it cannot take the singular term “high-frequency oscillator” (lines 3-4) as antecedent.

Lines 7-13 of independent claim 1 are indefinite and unclear in that the use of the potential language “can” (lines 7 and 11) and “it being possible” (line 8)

cause these lines to fail to claim the expressed subject matter clearly and definitely.

Independent claim 1 is indefinite and unclear in that there is mention made of "clock signals," but there is no recitation of a clock to provide the "clock signals."

On line 3 of dependent claim 3, it is unclear in context what is meant by "mixer MIX" as opposed to simply "mixer."

In dependent claim 6, it is unclear in context what the phrase "constructed as LTCC-HF modules." How are the "transmit and receive units" constructed so as to be like "LTCC-HF modules"?

In dependent claims 7 and 8, the uses of the shorthand "and/or" and of the shorthand "is/are" makes the claim indefinite and unclear. The claims must be written in the English language, not in shorthand of any kind.

On line 8 of claim 8, the use of "can" is indefinite and unclear in context in that it expresses potential rather than claiming the action in view clearly and definitely.

Dependent claims 8-15 are indefinite and unclear as to what they define in that they are presented as method claims, but they depend from apparatus claims and in that they do no recite positive method steps.

On line 2 of dependent claim 16, it is unclear in context what is meant by "mixer MIX" as opposed to simply "mixer."

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Claims 1-16 are indefinite and unclear in that they are mis-descriptive of the disclosed invention in that claims 1-16 are presented as being directed to a "Multistatic sensor arrangement" and method, but the disclosure only shows a multistatic radar arrangement and method, where the term radar is used in the true sense of the word radar (limited to radio frequencies).

Dependent claims 2-16 are unclear in that they depend from unclear independent claim 1.

3. The Specification is objected to under 37 CFR §1.71 in that it discloses a multistatic radar (RF) apparatus and method, but the claims are directed to a general "Multistatic sensor arrangement" and method. Support is not found in the Specification for any embodiment other than an RF radar embodiment.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a multistatic RF radar, does not reasonably provide enablement for a multistatic sensor arrangement. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or to use the invention commensurate in scope with these

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claims. Please see the remarks with the objection to the Specification in section 3 above.

6. Claims 1-16 are so indefinite and unclear that it is not possible to indicate potentially allowable subject matter at this time or to determine with any degree of certainty what Applicants intend to claims.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The examiner-cited prior art herewith is of general interest for showing the state of the related prior art insofar as unclear claims 1-16 may be interpreted.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernarr E. Gregory whose telephone number is (571) 272-6972. The examiner can normally be reached on weekdays from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza, can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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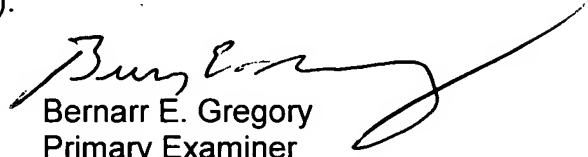
published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).


Bernarr E. Gregory
Primary Examiner
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